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ABSTRACT

As part of the United States Navy's efforts to enlarge its pool of personnel who are qualified for service and who will seek long-term careers in the Navy, the research branch of the Chief of Naval Education and Training contracted Research for Better Schools (RBS), Inc., to examine two areas related to personnel development: basic skills instruction and career development. Specifically RBS examined the Navy's current basic skills remediation programs and needs, the existing Navy training continuum (with particular reference to career opportunities), and current Navy programs and development efforts in basic skills and career development. These were examined in light of instructional approaches and systems used in adult basic education programs around the country. The major product of this effort is a reference document that presents, in an easy-to-use format, information on relevant programs, materials, and instructional strategies from both the military and the civilian sectors, as well as a list of individuals, organizations, and periodicals specializing in areas relevant to future Navy basic skills development. (Author/FL)

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A RESOURCE GUIDE TO ASSIST THE NAVY IN DEVELOPMENT OF ALTERNATIVE STRATEGIES TO MEET ITS BASIC SKILLS NEEDS

ANNUAL MEETING OF THE
AMERICAN EDUCATIONAL RESEARCH ASSOCIATION
Los Angeles, California
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As part of the Navy's effort to enlarge its pool of personnel who are qualified for service and who will seek long-term careers within the Navy, the Research Branch of the Office of the Chief of Naval Education and Training (CNET) contracted Research for Better Schools, Inc. (RBS) to examine two areas related to personnel development. These areas are basic skills instruction and career development. Specifically, RBS was asked to examine the Navy's current basic skills remediation programs and needs, the existing Navy training continuum, with particular reference to career opportunities, and current Navy programs and development efforts in basic skills and career development.

One of the most striking needs which became apparent during the course of this activity was the need to collect and document, in some kind of usable and accessible form, what had already been done and what was being done elsewhere. This was particularly true in the area of basic skills in which there seemed to be a myriad of basic skills programs popping up throughout the Navy's schoolhouses in order to meet the very real and pressing needs of instructors facing trainees who could not begin to cope with the required curriculum because of deficient reading, math, and language skills. However, many such programs were being developed without apparent cognizance of previous military or civilian approaches to similar problems or of many important issues which should be addressed in adult basic skills curriculum development.

In point of fact, a great deal of research and development related to military basic skills needs has been done, and a significant amount of documentation on these efforts exists. A few landmark documents stand out,

such as the 1977 GAO study, "A Need to Address Illiteracy Problems in the Military," and a 1976 report edited by Sticht and Zapf, "Reading and Readability Research in the Armed Services." There are also a number of relevant technical reports developed by specific groups, such as the Navy Personnel Research and Development Center, the Navy's Training and Evaluation Group, the Army's Training Doctrine Command, the Army Research Institute for the Behavioral Sciences, the Air Force Human Resources Laboratory, and private organizations, such as the Human Resources Research Organization (HumRRO). (A partial listing of significant studies related to basic skills in the military is provided under "References" at the end of this paper.) These reports can usually be accessed through contact with the group which produced them or through the search facilities of the Defense Technical Information Center or the Educational Resources Information Center (ERIC). However, running down all these possible sources is a very time-consuming process, and, unfortunately, demands for rapid decisions or quick start-up times for program efforts all too often create time constraints which preclude a very thorough search for relevant documentation.

There are, of course, a few individuals who have been involved with basic skills instruction in the military for a long enough time that they personally have access to this information. But tnese individuals frequently rotate to new positions, retire, or change to other careers; hence their information is often lost with them. Furthermore, those few individuals with intimate knowledge of basic skills activities within their own branch of the military are frequently unfamiliar with activities in the other services or within the civilian sector.

Therefore, there seemed to be a considerable need for some kind of document to help the wide-range of types of individuals involved in the Navy basic skills development process, be they senior personnel rotated into positions which require direction and/or assessment of developmental efforts, outside contractors unfamiliar with past and present Navy basic skills efforts, or educational specialists at the schoolhouse level grappling with the basic skills needs of personnel at their own sites. Furthermore, it appeared that such a guide would be most useful if it provided the following:

- a quick and easy access to information on key issues and state-of-the-art instructional and programmatic approaches as well as relevant past and existing programs and materials
- a listing of human resources (leading experts, organizations, and national associations working in and concerned with related areas)
- a brief outline of major basic skills instruction activities in all four military services

If such a guide were available, the development of new basic skills programs could be aided by early identification of past experience, current developments, and sources of expertise. Duplication of past efforts (and mistakes) could be avoided; cooperation among current efforts could be arranged; and state-of-the-art approaches could be employed.

In response to this need, RBS, under the direction and sponsorship of CNET, working through the National Institute of Education, has undertaken to develop such a guide. Due to resource and time constraints, not every pertinent study and human resource could be cited. However, effort was directed toward development of a short document which would:

- identify key areas for consideration in Navy basic skills development
- cite enough documents in each area to provide leads to further information
- identify key individuals, programs, organizations, and associations which could assist the user in a search for resources and information pertinent to a specific Navy basic skills development need

RBS is now completing this document, which is tentatively titled "A Resource Guide for Development of Job-Related Basic Skills." It is expected that it will be delivered to CNET in early May, 1981. A description of the content and organization of this guide is presented below.

Overview of the Guide

This guide was developed to provide help in planning, development, and assessment of job-related basic skills programs for use with Navy personnel across the continuum of their service careers. It contains pertinent bibliographic information and resource listings of individuals and organizations from both the civilian and military sectors as well as a brief description of current basic skills activities in the four military services. The guide is intended to be comprehensive but not exhaustive in any area. Rather, it includes representative materials to highlight key issues and to provide leads to further information on the same or related topics. Although information is provided from the civilian sector, especially as it relates to job-related literacy, primary emphasis is placed on direct military applications and experience.

The document is organized into (1) an annotated bibliography, (2) a listing of human resources, and (3) a brief description of the current

approach to basic skills remediation being taken by each of the military services. For the purposes of this document, and as a reflection of current CNET concerns, basic skills are defined here as reading and mathematics. The term "job-related" used in conjunction with "basic skills" refers to those reading and mathematics skills which are required for successful completion of job training and subsequent job performance.

Annotated bibliography. The annotated bibliography is divided into six sections. Each section begins with an overview of its contents and the rationale for its focus.

Section One contains an annotated listing of publications which attempt to define and document the problem of functional literacy (which in much of the literature refers to functional mathematics skills as well as skills related to functional reading). Listings are divided into those which deal with the general problem of functional literacy, those which deal with job-related aspects, and those which are military specific.

Section Two contains a listing of publications relevant to determination of specific objectives to be taught in a functional literacy program. This section lists publications in the area front-end analysis, reading objectives, mathematics objectives, job-related objectives, and learning strategy objectives.

Section Three examines three instructional considerations which are pertinent to the general context of basic skills instruction in the Navy but which seem to have been neglected in many previously developed programs: cognitive issues, adult learner characteristics, and the role of the computer in basic instruction. (The computer was singled out for special consideration because of the extent of current CNET interest

in its uses and the preliminary but encouraging reports of its usage, especially with adult learners.)

Section Four lists publications which describe relevant programs and materials, both civilian and military.

Section Five lists publications related to assessment of functional competencies.

Section Six provides a listing of the names and publisher addresses of periodicals which frequently deal with topics relevant to development of Navy basic skills instruction. This section was added not only to assist in the location of articles cited in this bibliography but to guide the user to publications which, on the basis of past article selection, may be useful sources of pertinent articles in the future.

As a further aid to the user, an Educational Resources Information Center (ERIC) number is provided at the end of the citation for each document which is known to be available through ERIC.

Human Resources. This portion of the document provides information on key individuals and organizations that are active in areas relevant to the development of Navy basic skills instruction.

The section on individuals provides name, address, telephone number, and an indication of that individual's pertinent area(s) of expertise.

The section on organizations lists name, address, telephone number, and an indication of its basic function. If specific divisions or specific projects within the organization have particular relevance to Navy basic skills development efforts, these are also noted along with, if possible, a contact person and that individual's telephone number.

Information in this section is grouped under (1) military groups; (2) laboratories, centers, and federal agencies; and (3) national associations.

Current programs in each of the military services. The final section of this document provides a brief description of the approach to basic skills remediation being used by each of the military services: the Air Force, the Army, the Marine Corps, and the Navy.

General Comments on the Guide

A few comments should be made about the rationale for decisions on the type and extent of materials presented. Resources cited are not intended to be exhaustive. Rather they are presented in order to give the user a few points of contact in a first probing of a specific area of interest. Since this document was developed to provide a "quick study," the number of references cited had to be kept at a minimum, the final selection being an attempt to provide no more than a representative sample of the most pertinent documents. Some entries could have been appropriately placed under more than one heading. In those cases, the entry was placed under only one heading and merely referred to under the other(s). And finally, there is considerable variation in actual entry length. Entry length was based on (1) the amount of information required to convey the nature and relevance of the document and/or (2) the specific relevance of the content. In a few cases, a particular document contained extremely relevant information which would not ordinarily be part of a general annotation. In those cases, that information was included, thus further contributing to variation in entry length.

In conclusion, it is hoped that this document will assist the Navy in the identification, development, and/or selection of effective alternate strategies to meet their basic skiils needs.

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